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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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03/29/2004

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EXAMINER

STOFFREGEN, JOEL

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/810,564	Applicant(s) LUECK, MICHAEL F.	
	Examiner Joel Stoffregen	Art Unit 2626	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 March 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-17 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>03/29/2004, 10/27/2006</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This action is in response to the original application filed on 03/29/2004.

Claims 1-17 are currently pending in this application. Claims 1 and 10 are independent claims.

Information Disclosure Statement

2. The information disclosure statements (IDS) submitted on 03/29/2004 and 10/27/2006 are being considered by the examiner.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. **Claims 1-17** are rejected under 35 U.S.C. 102(b) as being anticipated by Alleva et al., Patent No. US 5,970,449 ("ALLEVA").

5. Regarding **claim 1**, ALLEVA teaches a configurable formatting system for generating a desired representation of an expression within a word list ("a context-free grammar is applied to perform the text normalization", column 2, lines 59-60), said system comprising:

(a) a dictionary database ("context-free grammar 40", column 5, line 26) for storing at least one category ("divided into three major sections ... '[spacing]', '[capitalization]', '[Rules]'", column 5, lines 30-33), said category containing at least one word and at least one translation rule ("includes substitute text 54 that replaces the text that was output", column 4, lines 56-57);

(b) a configuration file coupled to the dictionary database containing at least one variant to the contents of at least one category of the dictionary database ("the text file may be merely edited", column 8, lines 54-55), said variant to the contents of at least one category being used to overwrite the contents of said at least one category within said dictionary database ("the tree is revised accordingly by reading the contents from the edited text file altering the tree in a matching fashion", column 8, lines 58-60);

(c) a working list module coupled to the dictionary database for reading a word from the word list ("words are stored within a text buffer 122 that is used by the text normalizer 38", column 8, lines 4-5) and identifying whether a word is associated with the expression by searching the categories of said dictionary database for said word ("processed by the text normalizer to determine whether there are any matching rules or not", column 8, lines 6-7), said working list module being adapted to:

(i) insert the word into a working list if the word is associated with the expression (see FIG. 9, words are inserted into the processed buffer 124);

(ii) process the word list when the word is associated with the termination of the expression ("a rule will be applied when at least a complete rule has been

identified and no further portion of a rule can be applied”, column 7, lines 52-54, see also column 8, lines 1-27 for an example); and

(d) a formatting module coupled to the working list module for processing the words from the working list and generating the desired representation of the expression from the working list (see column 8, lines 1-27, FIG. 9, the text normalizer 38 applies the rules).

6. Regarding **claim 2**, ALLEVA further teaches that the working list module utilizes the categories of said dictionary database to identify whether a word is associated with the expression (“processed by the text normalizer to determine whether there are any matching rules or not”, column 8, lines 6-7).

7. Regarding **claim 3**, ALLEVA further teaches that the working list module is adapted to be either in a NoCheck state or in a WordInNumber state according to the following:

(i) when word list is empty, working list module is in a NoCheck state (see FIG. 7, node 100);

(ii) working list module enters into a WordInNumber state when the word being read is associated with the expression (see FIG. 7, node 102); and

(iii) working list module returns to the NoCheck state when the word being read is associated with the termination of the expression (“a rule will be applied when at least a

complete rule has been identified and no further portion of a rule can be applied”, column 7, lines 52-54, see also column 8, lines 1-27 for an example).

8. Regarding **claim 4**, ALLEVA further teaches that said working list module is further adapted to determine whether a word is associated with the expression, by:

(iv) determining whether the working list module is in the WordinNumber state (‘the number rule 128 is applied to replace ‘twenty’ with ‘20’”, column 8, lines 23-24);

(v) determining whether the working list module is in the NoCheck state and the word is a numeral (“the first word, ‘five,’ is processed ... there will be a match within the digit rule 126 for this word”, column 8, lines 5-8); and

(vi) if either (iv) or (v) is true then determining that the word is associated with the expression (see FIG. 9).

9. Regarding **claim 5**, ALLEVA further teaches that the word is associated with the termination of an expression when the word is a punctuation character (“if a period is followed by a space, two spaces are to be substituted for the single space”, column 5, lines 49-52).

10. Regarding **claim 6**, ALLEVA further teaches that the word is associated with the termination of an expression when the word is not present within any of the categories of the dictionary database (“before applying the rule, the text normalizer 38 looks at the

next word 'chickens' as there is no rule that applies to the phrase 'five chickens,' the text normalizer 38 knows that it is done", column 8, lines 8-11).

11. Regarding **claim 7**, ALLEVA further teaches that said formatting module is adapted to look up the category associated with a word within the dictionary database (see FIG. 9, rules 126, 128, and 130).

12. Regarding **claim 8**, ALLEVA further teaches that said formatting module formats the word according to the translation rule associated with the category associated with the word (see FIG. 9).

13. Regarding **claim 9**, ALLEVA further teaches that the category for the word is used to format the word in association with another word within working list ("the system seeks to apply the rule that will normalize the greatest length string within the text", column 7, lines 48-49, see also column 8, lines 1-27 for an example).

14. Regarding **claim 10**, ALLEVA teaches a configurable formatting method for generating a representation of an expression within a recognized word list ("a context-free grammar is applied to perform the text normalization", column 2, lines 59-60), said method comprising:

(a) storing at least one category ("divided into three major sections ... '[spacing]', '[capitalization]', '[Rules]'", column 5, lines 30-33) in a dictionary database ("context-free

grammar 40", column 5, line 26), said category containing at least one word and at least one translation rule ("includes substitute text 54 that replaces the text that was output", column 4, lines 56-57);

(b) storing at least one variant to the contents of at least one category of the dictionary database in a configuration file ("the text file may be merely edited", column 8, lines 54-55) and using the contents of at least one category to overwrite the contents of said at least one category within said dictionary database ("the tree is revised accordingly by reading the contents from the edited text file altering the tree in a matching fashion", column 8, lines 58-60);

(c) reading a word from the word list ("words are stored within a text buffer 122 that is used by the text normalizer 38", column 8, lines 4-5) and identifying whether the word is associated with the expression by searching the categories of said dictionary database for said word ("processed by the text normalizer to determine whether there are any matching rules or not", column 8, lines 6-7);

(d) inserting the word into a working list if the word is associated with the expression (see FIG. 9, words are inserted into the processed buffer 124);

(e) processing the word list when a word is associated with the termination of the expression ("a rule will be applied when at least a complete rule has been identified and no further portion of a rule can be applied", column 7, lines 52-54, see also column 8, lines 1-27 for an example); and

(f) formatting the words from the working list and generating the desired representation of the expression from the working list (see column 8, lines 1-27, FIG. 9, the text normalizer 38 applies the rules).

15. Regarding **claim 11**, ALLEVA further teaches that the categories of said dictionary database are used to identify whether a word is associated with the expression ("processed by the text normalizer to determine whether there are any matching rules or not", column 8, lines 6-7).

16. Regarding **claim 12**, ALLEVA further teaches that (c) further comprises moving between a NoCheck state or in a WordInNumber state according to the following:

- (i) when word list is empty, being in a NoCheck state (see FIG. 7, node 100);
- (ii) entering into a WordInNumber state when the word being read is associated with the expression (see FIG. 7, node 102); and
- (iii) returning to the NoCheck state when the word being read is associated with the termination of the expression ("a rule will be applied when at least a complete rule has been identified and no further portion of a rule can be applied", column 7, lines 52-54, see also column 8, lines 1-27 for an example).

17. Regarding **claim 13**, ALLEVA further teaches that (c) further comprises:

- (iv) determining whether the working list module is in the WordInNumber state ('the number rule 128 is applied to replace 'twenty' with '20"', column 8, lines 23-24);

(v) determining whether the working list module is in the NoCheck state and the word is a numeral ("the first word, 'five,' is processed ... there will be a match within the digit rule 126 for this word", column 8, lines 5-8); and

(vi) if either (iv) or (v) is true then determining that the word is associated with the expression (see FIG. 9).

18. Regarding **claim 14**, ALLEVA further teaches that the word is associated with the termination of an expression when the word is a punctuation character ("if a period is followed by a space, two spaces are to be substituted for the single space", column 5, lines 49-52).

19. Regarding **claim 15**, ALLEVA further teaches that the word is associated with the termination of an expression when the word is not present within any of the categories of the dictionary database ("before applying the rule, the text normalizer 38 looks at the next word 'chickens' as there is no rule that applies to the phrase 'five chickens,' the text normalizer 38 knows that it is done", column 8, lines 8-11).

20. Regarding **claim 16**, ALLEVA further teaches that (f) further comprises looking up the category associated with a word within the dictionary database (see FIG. 9, rules 126, 128, and 130).

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21. Regarding **claim 17**, ALLEVA further teaches that the category associated with the word is used to format the word in association with another word within working list ("the system seeks to apply the rule that will normalize the greatest length string within the text", column 7, lines 48-49, see also column 8, lines 1-27 for an example).

Conclusion


22. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. A list of the pertinent prior art can be found on the included form PTO-892 Notice of References Cited.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joel Stoffregen whose telephone number is (571) 270-1454. The examiner can normally be reached on Monday - Friday, 9:00 a.m. - 6:30 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick Edouard can be reached on (571) 272-7603. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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